

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Claim 9 is currently being amended to correct a clerical error.

New claim 10 is being added. Support for claim 10 can be found at least in original claim 3.

This amendment adds and changes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1, 3, 5, 6, and 8-10 are now pending in this application.

Allowable subject matter

Applicants appreciate the indication that claim 3 would be allowable if rewritten in independent form. Claim 3 has not been amended at this time, because applicants believe that claim 1, from which claim 3 depends, is allowable.

Rejection under 35 U.S.C. § 103

Claims 1, 5-6 and 8-9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,156,485 to Tang et al. (hereafter “Tang”) in view of EP 0 840 361 A2 to Cheung et al. (hereafter “Cheung”). Applicants respectfully traverse this rejection for at least the following reasons.

The present inventions as claimed in independent claims 1 and 5 are directed to solving problems which occur with chemically-amplified resists, which are resists that are used, for example, with short wavelength light and that absorb less light and have a high sensitivity (see present specification, page 1, lines 22-29). In that regard, both claims 1 and 5

recite “forming a chemically-amplified photoresist layer on the silicon-oxide-based film.” Tang fails to suggest forming a chemically-amplified photoresist layer on a silicon-oxide-based film, and Cheung fails to cure the deficiencies of Tang.

Tang discloses one embodiment where a thick photoresist 150 is formed on a plasma enhanced oxide 140 (Fig. 3A, col. 6, lines 12-17). Tang discloses another embodiment where a thinner photoresist 250 is formed on layer 240 (Fig. 4A, col. 7, lines 9-15).

Tang, however, fails to disclose that the photoresist 150 or 250 is a chemically-amplified photoresist. In fact Tang suggests that longer wavelength light is used to expose the photoresist (see col. 7, lines 7-9), not the shorter wavelength light that is typically used for chemically amplified photoresist.

Cheung fails to suggest that the Tang process should be modified to include forming a chemically amplified photoresist, and thus fails to cure the deficiencies of Tang.

Moreover, Cheung fails to disclose that the resist used in the Tang process is one which would encounter problems where it would be desirable to reduce nitrogen in Tang’s oxide film 140. Thus, there is no motivation to modify Tang in the manner suggested in the Office Action.

For at least the above reasons, applicants submit claims 1 and 5 are patentable over Tang and Cheung. Dependent claims 3, 6 and 8-10 are patentable for at least the same reasons as their respective independent claims, as well as for further patentable features recited therein.

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment,

to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date March 4, 2005

By Thomas G. Bilodeau

FOLEY & LARDNER LLP
Washington Harbour
3000 K Street, N.W., Suite 500
Washington, D.C. 20007-5143
Telephone: (202) 672-5485
Facsimile: (202) 672-5399

William T. Ellis
Attorney for Applicant
Registration No. 26,874

Thomas G. Bilodeau
Attorney for Applicant
Registration No. 43,438